United States General Accounting Office Washington, D.C. 20548

FOR RELEASE ON DELIVERY Expected at 10:00 a.m. EST April 22, 1969

STATEMENT OF

ELMER B. STAATS, COMPTROLLER GENERAL OF THE UNITED STATES BEFORE THE

SUBCOMMITTEE ON GOVERNMENT RESEARCH
COMMITTEE ON GOVERNMENT OPERATIONS, UNITED STATES SENATE

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Mr. Chairman and Members of the Subcommittee:

At your request, we appear before you today to present information developed by the General Accounting Office in its study to assist the legislative and appropriation committees in achieving a realistic and uniform formula for ascertaining indirect costs on research grants based on sound accounting principles.

WHY THE STUDY WAS MADE

Department of Defense appropriation acts for fiscal years 1966 through 1968 provided that any recipient of a DoD grant for the conduct of a research project would not be paid the entire cost of the project. Recipients of research grants, therefore, were required to share in the costs. Similar cost-sharing requirements were contained in appropriation acts of other agencies awarding Federal research grants.

The 1969 Department of Defense appropriation bill passed by the House of Representatives, and approved by the

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Senate Committee on Appropriations, contained the costsharing requirement of previous years' acts.

However, on September 20, 1968, Senator Mansfield proposed a substitute for the cost-sharing language by the following amendment to the bill:

"No part of the funds provided in this or any other Act shall be used to pay any recipient of a grant or contract for the conduct of a research project an amount for indirect expenses in connection with such project in excess of 25 per centum of the direct costs."

Unlike previous limitations on overhead, the proposal would have been applicable to research contracts as well as grants and would have affected commercial organizations as well as educational and other nonprofit institutions.

Senator Mansfield's amendment was passed by the Senate with the qualification that it would apply only to the Department of Defense rather than to all appropriation acts. In conference, the language of both the House (cost sharing) and the Senate (25 percent limitation on indirect costs) was stricken from the bill.

The conference committee stated that new and comprehensive studies should be made of the entire area by the General Accounting Office, appropriate legislative committees, and the appropriation committees. The studies should be directed toward achieving a uniform formula for the ascertaining of indirect costs on research grants throughout the entire Government. The Government should set the basis for indirect costs based upon sound accounting principles. The committee felt that if such allocation between direct and indirect costs is properly made, it would appear that

the proper proportion of indirect costs to direct costs should not exceed 25 percent.

The intent of the conference committee was transmitted to the General Accounting Office by letter of October 11, 1968, from Representative George H. Mahon, Chairman, House Committee on Appropriations.

SCOPE OF GAO STUDY

The Mansfield amendment would have placed an overhead limitation on both grants and contracts for research projects. The conference committee, however, directed that studies be made toward "achieving a uniform formula for the ascertaining of indirect costs on research grants throughout the entire Government." The request received by the General Accounting Office from Congressman Mahon also was limited to research grants.

Public Law 85-934, authorizing Federal agencies to make grants for the support of research, permits the agencies to enter into such agreements only with institutions of higher education or nonprofit organizations primarily engaged in scientific research. Accordingly, we conducted our study at 13 colleges and universities, two hospitals, and two nonprofit research institutions. We concentrated on the educational institutions since most of the basic research performed outside of Government laboratories was conducted by universities in fiscal year 1968. The number of institutions included was limited in view of the time available.

Because some agencies use the contract instrument for the same type of research that other agencies obtain through use of the grant instrument, we also reviewed research contracts with educational and nonprofit institutions. We did not include development contracts. We met with officials of the six governmental departments and agencies which spend the predominant share of Federal research funds. We conferred with institutional representatives, such as the American Council on Education. We obtained data on indirect cost negotiations with 190 institutions from agency files.

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We also obtained information on the practices and policies of agencies and institutions with respect to sharing in the cost of research projects. We included this subject in our study in view of the facts that the Congress substituted a requirement for cost sharing for a fixed overhead limitation on grants in 1966 and the Mansfield amendment would have returned to a fixed percentage overhead limitation. Cost sharing will be discussed in greater detail later in this statement.

SUMMARY OF GAO FINDINGS

In summary it is our conclusion that a uniform formula, in the sense of a uniform percentage rate applied to direct cost or some element thereof, will not result in a realistic determination of indirect cost, based on sound accounting principles. Nor do we believe it feasible to determine indirect cost by a fixed method or procedure applied uniformly under all conditions. Overhead rates are merely a measure of the indirect portion of the total cost of research and there are a number of valid reasons why indirect cost rates vary. The General Accounting Office does believe, however, that uniform principles and guidelines can

be used for the determination of indirect cost, provided they have sufficient flexibility to be applicable to differing circumstances in an equitable manner.

Bureau of the Budget Circular No. A-21 is intended to provide principles and guidelines in determining research costs. As a result of our study we believe consideration should be given to providing more specific guidance and greater uniformity in the implementation of these principles and guidelines. While we do not believe that additional guidance or improved administration will eliminate variations in the levels and rates of indirect costs, they should serve to lessen the differences.

There are numerous kinds of costs in the performance of research which properly are treated as direct costs in some circumstances and as indirect costs in others. The differences in method of treatment would cause significant differences in the relationship of indirect costs to direct costs but the total costs incurred would not be affected.

There are differences also in the missions of the institutions, the nature of their research projects, their methods of operation, and the manner in which they are organized to perform research. Accordingly, the amount of indirect cost incurred will vary considerably.

Furthermore, the bases used in computing overhead rates vary. Previous statutory limitations, and the Mansfield amendment, were directed towards limiting indirect expenses to a percentage of direct costs. Most institutions use other bases in calculating overhead rates.

The wide variation in existing overhead rates does not mean that institutions with higher rates are less efficient than those with lower rates nor does it mean that the total cost of research is greater at those universities with higher rates for indirect costs. The fact that higher overhead rates are reported by some institutions does not indicate that the Government is paying profit, fees, or subsidy to those institutions. Overhead rates do not measure, and should not be used to evaluate, research efforts.

FACTORS AFFECTING INDIRECT COSTS

The cost of research is comprised of the direct costs incident to its performance plus the appropriate portion of indirect or overhead costs of an institution.

Direct costs are those that are specifically incurred in the performance of a research project. Direct costs ordinarily include

- --salaries and wages of persons directly engaged in research,
- --related employee benefit expenses,
- --costs of material and supplies consumed,
- -- the cost of special equipment purchased,
- --travel expenses, and
- --other costs which may be identified directly with a given research project.

Indirect or overhead costs are those that have been incurred for common or joint purposes of research, instruction and related activities. These should be distributed in reasonable and equitable proportions relative to their contribution to the research activities. Indirect costs usually consist of expenses for:

- --general administration,
- --departmental administration,
- -- research administration,
- --operation and maintenance,
- --library, costs. and
- --use charges for buildings and equipment.

Indirect costs are real costs of common or joint functions. An appropriate portion of these costs together with direct costs make up the total cost of the research activities concerned.

TREATMENT OF RESEARCH COSTS

The treatment of a particular research cost varies with circumstances, depending upon whether the cost is incurred specifically for a particular project or the amount is directly identifiable with that project. If so, good accounting practice would be to charge a particular cost directly to the project. If not, it should be handled as an indirect cost and included in the total of such costs assigned to the various activities supported, on some basis proportionate to the benefits provided.

The handling of a cost as direct or indirect obviously affects the total of indirect cost. It also affects the amounts of direct cost to which the indirect cost normally is related. The identifying of an expense as a direct cost not only reduces the amount of indirect cost but also the ratio of indirect cost to direct cost. Accordingly, the overhead rate is further reduced by reason of the larger direct cost to which the indirect cost may be related. The total cost, of course, should not be affected.

The level of indirect costs and the question of whether a research cost is properly treated as direct or indirect, thereby having an ultimate effect on the overhead rate, are influenced by at least seven broad factors; (1) the nature of the educational institution and the manner in which it is organized; (2) the nature of the research performed; (3) the location of the research facilities; (4) the variations in research facilities; (5) the management policies of institutions; (6) sophistication of accounting systems; and (7) varying bases used to express overhead rates.

- 1. Nature of The Institution. In terms of the scope of studies pursued and the extent of research involved, the nature of the institution affects the amount of overhead. A specialized science and engineering institution is likely to have a high percentage of its space devoted to laboratories and equipment, involving considerably greater expense for maintenance, house-keeping, and utilities than classroom and lecture hall facilities.
- 2. Nature of Research. The nature of research has an impact on the requirement of additional indirect costs generated by services needed to carry out the work. A research project in mathematics may require little space and support services compared to a research project in medicine or engineering. In the latter categories elaborate facilities, sensitive equipment, and precise environmental control are needed and may be charged as direct or indirect costs.

3. Location of Research Facilities. Whether a cost is charged as direct or indirect is often determined by the manner in which the institution performing the research operates its facilities. The place where the research is undertaken—on main—campus facilities or off—campus facilities—influences the research costs. Generally, more of the costs incurred in performing research in off—campus facilities, or in buildings used solely for research on main—campus, are charged directly. Under these circumstances, the costs are more readily identified as direct costs.

Depending on the proximity to the main-campus, many overhead costs charged to main-campus research, such as library costs, student service costs, and certain operation and maintenance costs, are not charged to off-campus work. Off-campus research activities do not benefit from these costs. Instead, to the extent that the off-campus activity requires such services, they are separately provided and their costs charged directly to the project.

There is an additional factor affecting indirect cost rates resulting from the geographical location of an institution. Some universities are situated in high cost areas, others in low cost areas. Costs of utilities and labor differ in the various regions of the country. Climatic conditions result in differences in the consumption of utilities and the need for maintenance, including expenses of shoveling snow, sanding, air conditioning, and so on.

4. Variations in research facilities. Variations in research costs also are caused by the type and age of structures used, the method of funding of the facilities, and the extent of maintenance required for the facilities. Building use charges are computed from acquisition costs of the buildings. Such charges obviously are greater for a modern and permanent structure than for an older or temporary structure. On the other hand, maintenance costs generally are greater for older structures.

The methods by which the construction of research facilities is financed also differ greatly, influencing the degree of building use charges made to research. For research conducted solely in buildings constructed by the universities, building use charges or depreciation costs would be charged to Government research, either directly or indirectly. On the other hand, for research performed in buildings constructed with Federal funds, no charge by the research institution for building use would be appropriate. In some instances research is conducted in rented space and rental cost is charged to the project, generally as a direct cost.

5. Management Policies. The manner in which certain costs are treated also varies depending on the management policies adopted by the institution. Some universities charge as direct cost employee fringe benefits, plant repairs, and building alterations. Others handle these as indirect costs. Either method may be appropriate depending on the circumstances.

Differences in indirect cost rates can result, in part, from differences in compensation policies. Salaries may differ substantially among academic professions. Those in medical and engineering fields generally command higher scales than their counterparts in social sciences or agriculture.

All universities provide personnel benefits, some more generously than others. An institution which provides greater amounts of personnel benefits, and treats them as an indirect cost, will have a higher indirect cost rate. An institution which provides only a few benefits probably will pay higher salaries in order to attract and retain competent people. The additional salaries would increase the direct labor base and result in a lower indirect cost rate.

Costs which are considered by management to be too difficult, or too expensive, in terms of administration and accounting, to charge directly to a particular undertaking are handled as indirect costs. Heat used for conditioning a laboratory or steam used in conducting an experiment may be measured accurately and charged as a direct cost, where such treatment is considered economically feasible, or may be charged as an indirect cost. Ordinarily, such precise determinations are not made for joint activities because of the large capital investment required to provide the metering equipment and the added personnel necessary to collect and compile the data. Where the research project is conducted as a separate activity, such cost is usually readily available and is charged directly.

- 6. Sophistication of accounting systems. We found that some universities have a higher degree of sophistication in accounting functions and are more knowledgeable and diligent than others in the preparation of overhead proposals. These universities have undertaken extensive and costly studies to show that certain overhead costs are benefitting research more In contrast to these univerthan other activities. sities, those not equipped to support their overhead proposals in similar detail may not be recovering overhead to the extent to which they might be entitled. Likewise, institutions with sophisticated accounting systems would be in a better position to transfer costs now treated as indirect to direct should a limitation be imposed on indirect costs.
- 7. Varying bases used to express overhead rates. In the negotiation of overhead rates between the Government and the institutions, the rate agreed upon is expressed as a percentage relationship of the indirect cost to some portion of the direct cost. The many different direct cost bases used for this purpose preclude a meaningful comparison of the various rates.

The 15, 20, and 25 percent limitations fixed by the Congress during the period from 1958 to 1966 limited payment of indirect expenses to the applicable percentage of direct costs. The Mansfield amendment likewise would have limited indirect expenses of a research project to 25 percent of the direct costs.

Our analysis of bases used by the institutions for determining a rate showed the following were all used: direct salaries and wages with no fringe benefits; salaries and wages with all, or some, fringe benefits; all direct costs except capital expenditures; and, in a few cases, total direct costs. Given the same set of circumstances, the selection of one base can result in a substantial difference in the overhead rate as contrasted with the rate produced by use of another base, without any change in the dollar amount of indirect cost.

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Using a hypothetical case, where the indirect cost of research is \$2,000 and the total direct cost is \$10,000, a variety of overhead rates can be expressed without any change in the indirect cost, direct cost, or total cost. If the salaries and wages portion of direct costs, \$4,000, is used as a base, the indirect cost, \$2,000, produces an overhead rate of 50 percent. If the base is enlarged to \$5,000, to include employee fringe benefits of \$1,000, the overhead rate is reduced to 40 percent.

If the direct cost base also includes "other direct costs except capital expenditures" of \$3,000, it becomes \$8,000 and the overhead rate is reduced to 25 percent. Finally, if the base used is total cost, including capital expenditures, of \$10,000, the indirect cost rate, based on the same \$2,000 indirect cost expense incurred, is 20 percent.

Although the use of a more uniform base for determining and stating the negotiated overhead rate would lessen the variations in rates, there would continue to be significant differences in the rate for reasons discussed previously.

POSSIBLE EFFECT OF INDIRECT COST LIMITATION

A limitation on indirect cost would give an institution the incentive to treat as many costs as possible as direct charges even though this practice may be unnecessarily expensive. It should be noted that direct costing not only reduces the indirect cost but also enlarges the direct cost base to which the indirect cost limitation is related, and thus would permit a higher recovery of indirect cost.

A limitation on indirect cost could cause institutions both to separately operate and administratively support Government-sponsored research, in order to enable identification and treatment of more costs as direct. This probably would result in a greater overall cost of the operation than had the research activity been operated and supported in common with other activities.

In this regard, one state institution expressed opposition to a limitation on indirect cost on the grounds that, under the laws prescribing the accounting methods for its state's schools, it would lack the flexibility that other schools might have to transfer costs from indirect to direct.

UNIFORM PRINCIPLES AND GUIDELINES FOR DETERMINING INDIRECT COSTS

The General Accounting Office does not believe that there is enough standardization in the method of operation or organization among research institutions and projects to permit the use of a uniform rate, or a fixed method, of determining indirect costs. It does believe that uniform principles and guidelines can be used for the determination of indirect costs, provided they have sufficient flexibility to be applicable to differing circumstances in an equitable manner.

Bureau of the Budget Circular No. A-21 is intended to provide such principles and guidelines. The cost principles of A-21 have been incorporated into the Armed Services Procurement Regulation, the Federal Procurement Regulations, and the NASA Procurement Regulation. Circular A-21 has been revised from time to time as experience has indicated a need. This is done by the Bureau of the Budget with the assistance of the Government agencies administering the program, and after discussion with representatives of the educational institutions. Various matters observed in our study indicate the need for consideration of further changes in the provisions and administration of the Circular.

The objective of Circular A-21 is to provide cost principles and guidance which, when properly applied in particular circumstances, will result in a determination of a realistic cost attributable to research. It explains, within a general framework, how direct costs can be charged. It provides guidelines as to the type of groupings for indirect costs and their bases for allocation to research projects. It defines allowable and unallowable costs. It suggests a simplified method for

determining indirect costs at institutions where the total direct cost of all Federal support under research and education service agreements does not exceed \$1 million in a fiscal year.

Basically Circular A-21 is a statement of principles and guidelines to be applied with judgment under varying circumstances, having the necessary flexibility to provide a realistic determination of costs on the basis of sound accounting principles.

The agencies involved in research administration as well as the academic community have expressed a preference for flexible cost principles for appropriate application to diverse conditions as stated by Circular A-21, rather than a rigid uniform formula for ascertaining indirect costs. They contend, and GAO agrees, that a rigid formula would result in inequity among the institutions and probably would hurt the institutions with smaller volumes of research. GAO does believe, however, that more uniformity than now exists is feasible and desirable.

The existing cost principles should continue to be revised, be more specific, or otherwise be changed, as is found necessary. These revisions may stem from recommendations from the agencies or educational institutions. They could also arise out of findings by the General Accounting Office, or to give recognition to policy decisions or guidance provided by the Congress. We believe it important that the principles be in a form subject to revision by administrative action to permit needed adjustments for problems and other matters arising from experience in the administration of these programs.

POTENTIAL IMPROVEMENT IN PRINCIPLES AND GUIDELINES

In our study we identified areas which appear to have a potential for improvement. Some appear to be at variance with the provisions of A-21, to be otherwise questionable, or to warrant consideration as to whether more uniformity in application or administration is needed.

However, it should be recognized that it was not possible in the time available for our study to evaluate these matters to the extent necessary to reach final conclusions. In some cases adjustments made in negotiations could not be identified with the specific items questioned by the Government auditors.

Nevertheless, we believe that the items observed, several of which will be discussed in this statement, and all of which will be included in our report to the Congress, indicate a potential for improvement through the use of more specific guidelines and uniform administration.

1. Equipment use charges. Universities are compensated for the use of their equipment in Government research through use charges or depreciation allowances. Use charges are generally computed on equipment acquisition costs up to a maximum annual rate of 6-2/3 percent. This is comparable to a depreciable useful life of 15 years.

We found that various types of records were maintained to support acquisition costs of equipment. Not all institutions have taken physical inventories of equipment in recent years. At one, information on acquisition costs was not maintained. At a second, the validity of the acquisition costs data was questionable. At a third, the cost of equipment disposed of was not deleted from the records.

In arriving at equipment use charges, generally computed at 6-2/3 percent, only two of 13 universities which we visited excluded equipment which was more than 15 years old. A-21 does not require such exclusion. Our limited study did not determine whether charges generated by this treatment were offset by losses on equipment disposed of before attaining a 15-year life.

We also found that different techniques were used by various institutions to allocate equipment use charges between instruction use and research use.

We believe that executive agencies concerned with improving A-21 should consider the following areas for possible improvement: (a) maintenance of inventory records, (b) application of use charges on equipment over 15 years old, (c) use of the cost of unused equipment in determining use charges, and (d) the need for a more uniform basis for allocating equipment use charges.

2. <u>Building use charges</u>. In the determination of compensation to universities for the use of buildings and capital improvements, there are areas similar to those relating to equipment use which we believe should be considered for more specific guidance.

We believe that an evaluation is needed to determine whether the two percent allowable use charge should apply to buildings over 50 years old. Consideration also should be given to whether more uniformity is needed in the computation of building use charges and the basis used in allocating building use charges to research.

3. Other indirect costs. There appears to be a need for more uniformity among the schools in charging research with an equitable portion of the costs of supporting activities, such as library expenses, student activity costs and student services costs. A-21 provides that general and administrative expenses, departmental administration expenses, and

operation and maintenance expenses be distributed to instruction, organized research, and other institutional activities. We found that a variety of methods were used to make these distributions.

RECOMMENDED ACTION

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On the basis of our study, we believe that consideration should be given by the Bureau of the Budget to the possibility of providing more specific guidance in certain areas and of achieving uniformity in the implementation of the principles and guidelines. We recognize that additional guidance or improved administration will not eliminate the variations in the levels and rates of indirect costs because of the differing situations previously discussed. However, differences can be reduced through improved administration.

The Bureau of the Budget has advised us that it will strive for more specific guidance in the areas we identified in our study in its next revision of Circular A-21.

FACTORS AFFECTING COST SHARING

In our study, we solicited views on cost sharing since the congressional interest in establishing a uniform formula for the ascertaining of indirect cost on research grants was related to a proposed substitution of an indirect cost limitation for the existing statutory requirement that the Government pay less than the full cost.

Mandatory cost sharing

Beginning with fiscal year 1966 appropriation acts, the Congress required those agencies awarding Federal research grants to obtain agreements from the grant recipients to share the costs. Prior to this time, some Government agencies had required cost sharing. In addition, colleges and universities had been voluntarily absorbing a portion of the costs of research sponsored by the Government.

In considering the 1966 appropriation for the Department of Health, Education, and Welfare, the House Appropriation Committee instructed the Bureau of the Budget to promulgate regulations which would result in an appropriate level of financial participation by the grantee. The Bureau issued BOB Circular No. A-74 in December 1965 referring to the language of the appropriation acts of 1966 which provided that "none of the funds provided herein shall be used to pay any recipient of a grant for the conduct of a research project an amount equal to as much as the entire cost of the project."

Circular No. A-74 directed the agencies to continue their policies and practices concerning the extent of cost participation by grantee institutions, except that where Federal agencies would otherwise bear the full cost, the applicant institutions must share in the costs on more than a token basis. Costs were to be determined in accordance with BOB Circular A-21, although the extent of cost participation could vary, depending on a number of factors.

Documentation of cost sharing

The Federal agencies were directed by Circular A-74 to require each grantee institution to maintain records to demonstrate its contribution and to report cost participations to the Bureau of the Budget for each fiscal year. The Bureau informed us that cost-sharing data submitted to it by the agencies are based upon the cost sharing contained in grant proposals rather than upon an after-the-fact determination.

Some educational institutions pointed out that they have always shared costs as a matter of policy and that mandatory cost sharing has not increased the amount of participation. Both Government agencies and educational institutions have informed us that mandatory cost sharing has added to the burden of administering grants by requiring dollar determinations and documentation of participation.

The universities contend that they share costs more than is required. They state that faculty researchers generally spend more time on Government research projects than is required by the terms of the grant. Also, they maintain that when overhead costs are rising, which is generally the situation, they absorb the difference between recovery at the rate of actual direct costs experienced during the grant period and the lower predetermined rate fixed by the grant agreement at the time of the award. The predetermined rate is based upon cost data which are usually several years old because the last audited, agreed-upon rate is used.

Institution officials further contend that there is additional cost sharing on every grant because A-21 does not permit any reimbursement for certain costs, such as interest, fund raising, and investment management.

Agency views on cost sharing

Generally, Government agencies believe that the greater degree to which the research is oriented to the agency mission, i.e. the Government's need, the lesser justification there is for mandatory cost sharing. The degree of national interest may be larger in those agencies where research is program-oriented in comparison with more general research such as that performed under National Science Foundation grants.

If mandatory cost sharing is continued, the agencies believe that the manner of implementation and administration should continue to be flexible in order for them to be able to consider cost-sharing proposals on a case-by-case basis. Bureau of the Budget officials stated that the degree of cost sharing should vary, in part, in accordance with the nature of the institution and its ability to contribute.

View of the academic community

The American Council on Education takes the position that, if cost sharing is desired by the Congress, it should be done on a voluntary basis. The Council believes, however, that the policy of cost sharing has been adopted without an adequate hearing to determine its merits, either before the Congress or any other forum. In its opinion, mandatory cost sharing on Federally-supported research has not accomplished the purposes claimed for it.

Methods of cost sharing

Although Circular A-74 established the general guidelines for cost sharing, the manner in which the circular is implemented was left to the respective agencies. In most of the instances which we examined, cost sharing was negotiated and administered on a project by project basis, to satisfy the requirements of the individual agencies concerned. Institution officials indicated that these arrangements are time-consuming and costly for their institutions.

Cost sharing could be accomplished by the so-called voluntary method which would eliminate the administrative effort associated with negotiating, documenting, and administering mandatory cost sharing. However, there would be no way to measure the extent of cost sharing and no assurance that voluntary cost sharing would not decrease as demands on the institutions' resources increase.

USE OF GRANTS AND CONTRACTS

FOR FUNDING RESEARCH PROJECTS

Cost sharing is required only on research performed under grant instruments. It is not required under contracts. Several agencies which use the contract as the principal instrument for obtaining research do obtain some degree of contribution from recipients. However, the only sharing that is required by law, and reported to the Bureau of the Budget, is on grants. The use of contracts relieves the agency of fulfilling mandatory cost sharing requirements. The Bureau of the Budget emphasized to us that Circular A-74 does not discourage cost sharing on contracts but, rather, does permit the agencies to continue their practices in cost participation for research financed through contracts.

Historically, there has been an effort to distinguish between the contract and the grant as an instrument for funding research projects. If the Government's purpose was to procure university research in support of a particular need of its own, the contract was said to be the logical instrument to use. If, however, the Government's purpose was to aid or support research compatible with the university's educational function but likewise in support of Government need, presumably the grant would be the appropriate mechanism.

University officials say that this traditional distinction between the contract and the grant now has little practical meaning. Many research contracts have characteristics traditionally associated with the grant and vice-versa. An investigator's work may be supported by either a grant or a contract, depending on which Federal agency funds a project.

The Bureau of the Budget recognized the need for a formal policy statement establishing criteria for using the grant or the contract form. In a report in March 1966 it recommended that consideration be given to developing a standard instrument—a research agreement—for use in circumstances not warranting a contract. This instrument would have the simplicity and flexibility traditionally associated with the grant. The Bureau of the Budget has initiated an interagency study to identify changes that are necessary to eliminate undesirable inconsistencies among agencies in terms and conditions of contracts and grants, and to determine actions that should be taken to promote the changes.

University officials generally were of the opinion that if the Government would use a standard agreement for sponsored research projects, there would be a significant savings in administrative cost. Officials of some Government agencies expressed serious doubts that a standard research agreement could be devised which would offer any particular advantage over the use of grants and contracts.

OBSERVATIONS ON COST SHARING

Both Government agencies and educational institutions are opposed in general to mandatory cost sharing. Both recognize that in some circumstances voluntary cost sharing is appropriate. Both believe that the amount of cost sharing is greater than that which has been identified. We in GAO believe that:

- (a) the merits of cost sharing and the validity of the arguments on both sides tend to vary depending on the purpose for which research awards are made; and,
- (b) ordinarily each award involves, to some degree, (1) furthering the agencies' program objectives and (2) promoting the institutions' research capabilities, the relative importance of each varying from project to project.

If the Congress should desire cost sharing on granttype research, there need to be well-defined and uniform
standards governing the use of contracts or grants for
research, on a Government-wide basis, to enable a more consistent application of cost sharing. We believe that additional criteria and guidance to the agencies to assist them
in following more consistent and uniform practices is both
feasible and desirable.

We concur in the concept adopted in 1966 that cost sharing, to the extent that such is required, should be related to the total cost of a project as contrasted to the concept of mandatory cost sharing by setting a limitation on the indirect cost rate. We believe that consideration of the interests of the Government and the institutions involved make it highly desirable that, within the requirements established by the Congress or the Executive Branch, the amount of cost sharing be flexible—a matter for negotiation between the responsible Government agency and the grantee institution.

As we have pointed out, there are divergent views on this matter. These differing views cause recurring problems. It appears to us that if a consistent policy is to be followed by the various agencies concerned there will be a need for guidance from the Congress or the Executive Branch as to whether cost sharing is to be required and, if so, the general level, and the kinds of research programs in which it will be expected, as well as the degree of latitude to be permitted in its administration.

Perhaps this subcommittee can go deeply enough into these matters with the Government agencies concerned, and the representatives of educational institutions who appear before it, to enable it to formulate the needed policy guidance and to obtain such approval by the Congress or the committees concerned as is necessary to resolve this problem.

As an alternative, if mandatory cost sharing is to be required, we believe that congressional control over cost sharing could be effectively provided with minimum administrative cost and burden through review by congressional committees in their legislative and appropriation hearings of the cost sharing policies followed by the various individual agencies. On the basis of such review, the agency could be required to make any desired revisions in its cost sharing policies.

Mr. Chairman, this concludes the statement on our study of indirect costs. I will try to answer any questions you or your committee may have.